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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,131	04/13/2000	Reynolds Gorsuch	TRANSVI.007A	7531

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EXAMINER

KIM, SUN U

ART UNIT	PAPER NUMBER
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1723

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DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/549,131**

Applicant(s)  
**Gorsuch et al.**

Examiner  
**John Kim**

Art Unit  
**1723**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 23, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above, claim(s) 1-29, 42, 43, 48, and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-41, 44-47, 50, and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4-5 6) ☐ Other: \_\_\_\_\_

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1. Claims 1-29, 42-43 and 48-49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8.

2. Claims 20, 32 and 47 are objected to because of the following informalities: "an/or" on line 1 of claim 30 should be corrected to "and/or". "an" before "interior" on line 4 of claim 32 should be corrected to "and". "membrane" on line 2 of claim 47 should be corrected to "membrane". Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 30-41, 44-47 and 50-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitations of "said inner wall" in claim 30 and "the inner and outer wall surfaces" in claim 32 and "said filter device" in claim 33 lack positive antecedent basis. Claim 41 lacks a scientific unit for a number "5" on line 2. Claim 44 lacks a scientific unit for a number "0.5" on line 2. Claim 47 lacks a scientific unit for a number "0.75" on line 2.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 30-41, 44-47 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,950,224 (Gorsuch et al '224) in view of U.S. Patent No. 4,935,141 (Buck et al) and EP 0882494 (EP '494). Gorsuch et al '224 teach an in-vivo plasma separation method comprising the steps of implanting a filter device in a vein wherein the filter device comprises a plurality of hollow fibers having a pore size of from about 0.1 micron to 1 micron and connected to a catheter and blood plasma passes through the wall of hollow fibers into a hollow center (see figures 1-7; col. 4, line 43 - col. 6, line 68). Claims 30-41, 44-47 and 50-51 essentially differ from the method of Gorsuch et al '224 in reciting asymmetrical hollow fiber membrane having a lower mass density at the inner wall surface and a higher mass density at the outer wall surface. Buck et al teach that selectively permeable asymmetric membranes are particularly advantageous when used in connection with various types of medical treatments including plasmapheresis (see col. 1, lines 20-47). EP '494 teaches an asymmetric hollow fiber membrane having a lower mass density at the inner wall surface and a higher mass density at the outer wall surface (see figure 1); furthermore, the asymmetric hollow fiber membrane is anisotropic which has a network structure which integrally continues from the inner surface to the outer surface wherein inner surface of the membrane has average pore diameter of 5 micron to 30 microns and outer surface of the membrane has average pore diameter of 0.05 micron or more and less than 1 micron (see figure 1; page 2, lines 5-6; page 2, line 55 - page 3, line 56). It would have been obvious to a person of ordinary skill in the art to use the asymmetrical hollow fiber membrane of EP '494 in the plasma

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separation method of Gorsuch et al '224 by taking particular advantages of selectively permeable asymmetrical membranes as noted by Buck et al.


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 4,882,223 teach an asymmetrical hollow fiber membrane and its use..

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is (703) 308-2350. The examiner can normally be reached on weekdays from 7:00 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached on (703) 308-0457. The fax phone number for official response after final action is (703) 872-9311, and the fax phone number for all other official faxes is (703) 872-9310.

When sending a draft amendment by fax, please mark the paper as "DRAFT"; otherwise, mark the paper "OFFICIAL". This will expedite the processing of the paper.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

  
John Kim  
Primary Examiner  
Art Unit 1723

J. Kim  
December 12, 2002